

Uranium Recovery Program Update

Bo Pham, Deputy Director

Bill von Till, Branch Chief

NMSS/DUWP



Current Focus

- Nuclear Fuels Working Group (NFWG) recommendations
- Streamlining and Risk-Informing efforts
 - 24-month review goal
 - Potential in situ recovery (ISR) rulemaking
 - EPA MOU on ISR rulemaking
 - Revising Inspection Procedures
- Enhanced collaboration with Agreement States
 - Alternate Concentration Limit (ACL) guidance
- Decommissioning sites



DOE Report: RESTORING AMERICA'S COMPETITIVE NUCLEAR ENERGY ADVANTAGE A strategy to assure U.S. national security

- The President established NFWG in July 2019 following Dept. of Commerce's investigation into impacts from imports.
- The DOE report (April 23, 2020) provides recommendations to “preserve and grow the assets and investments of the entire U.S. nuclear energy enterprise” as a matter of national security interest.
- Strategy outlines Executive, Congressional, and regulatory actions that could:
 - Enhance the positive attributes of nuclear power;
 - Revive capabilities of the uranium mining, milling, and conversion industries;
 - Strengthen U.S. technology supremacy; and
 - Drive U.S. exports, while assuring consistency with U.S. nonproliferation objectives and supporting national security.



ISR Potential Rulemaking

- In Situ Recovery (ISR) facilities rulemaking history
 - The NRC primarily regulates 11e.(2) byproduct material, including groundwater protection, through its regulations in Appendix A of 10 CFR Part 40, which is focused on conventional uranium milling activities.
 - Appendix A does not have specific regulations for ISRs. The NRC relies upon ISR-specific license conditions to effectively regulate ISR activities. These ISR-specific license conditions based on guidance (NUREG-1569) and informed by NRC operational experience.
 - In 2010, the NRC deferred its rulemaking because EPA stated its intention to amend its regulations setting forth generally applicable standards pursuant to its authority under UMTRCA (AEA §§ 275).
 - In October 2018, EPA withdrew its proposed ISR rulemaking issued in 2017 citing the NRC's successful regulatory framework for ISRs that is protective of public health , safety and the environment and the downturn in current and future uranium ISR activity.
- Scope of potential ISR rulemaking
 - If approved by the Commission, the staff would prepare and publish for public comment a proposed, limited scope ISR rulemaking to provide clarity, predictability, and efficiency in the licensing and regulatory process that would rely heavily on the existing NRC 2010 draft ISR proposed rule package.



ISR Potential Rulemaking (Cont)

- Current status of SECY19-0123, “Regulatory Options for In-Situ Recovery Facilities”
 - The staff provided SECY 19-0123 to the Commission on Dec 16, 2019 to provide options on how to proceed on ISR regulation.
 - The paper provided the following alternatives
 - No Action
 - Update ISR regulatory guidance only
 - Proceed with limited scope ISR rulemaking (recommended approach)
 - The staff is awaiting the decision of the Commission.
 - Letter and draft rule language from the National Mining Association June 12, 2020



EPA MOU

- The NRC and EPA worked cooperatively to develop an MOU in 2019/2020 to address roles and jurisdictional issues related to either agency conducting rulemaking related to the regulation of uranium in situ recovery (ISR) facilities.
- To assist either agency in future rulemaking regarding ISR activities, the MOU:
 - Provides a framework for cooperation and coordination for implementing each agency's statutory responsibilities under AEA §§ 84 and 275 with respect to the regulation of ISR activities in a timely, efficient, and thorough manner.
 - Identifies the responsibilities of the two agencies.
 - Fosters opportunities for effective and efficient communication between the two agencies, including the exchange of written information and interagency meetings.
- The MOU has been signed by both the NRC Chairman and the EPA Administrator.



Agreement State Focus

- 2019 Workshop on Alternate Concentration Limits (ACLs) in Salt Lake City, UT
- Meetings and site visits in Texas March 2020
- Monthly discussions with Wyoming on sites near to transfer to the DOE
- Upcoming workshop on Completion Review Reports - delayed due to COVID
- Collaboration with AS's if Commission approves going forward with an ISR rule
- Collaboration with AS's on UR guidance revisions and ACL guidance
- Assistance to AS's
- IMPEP reviews
 - WY IMPEP 2020 (virtual)



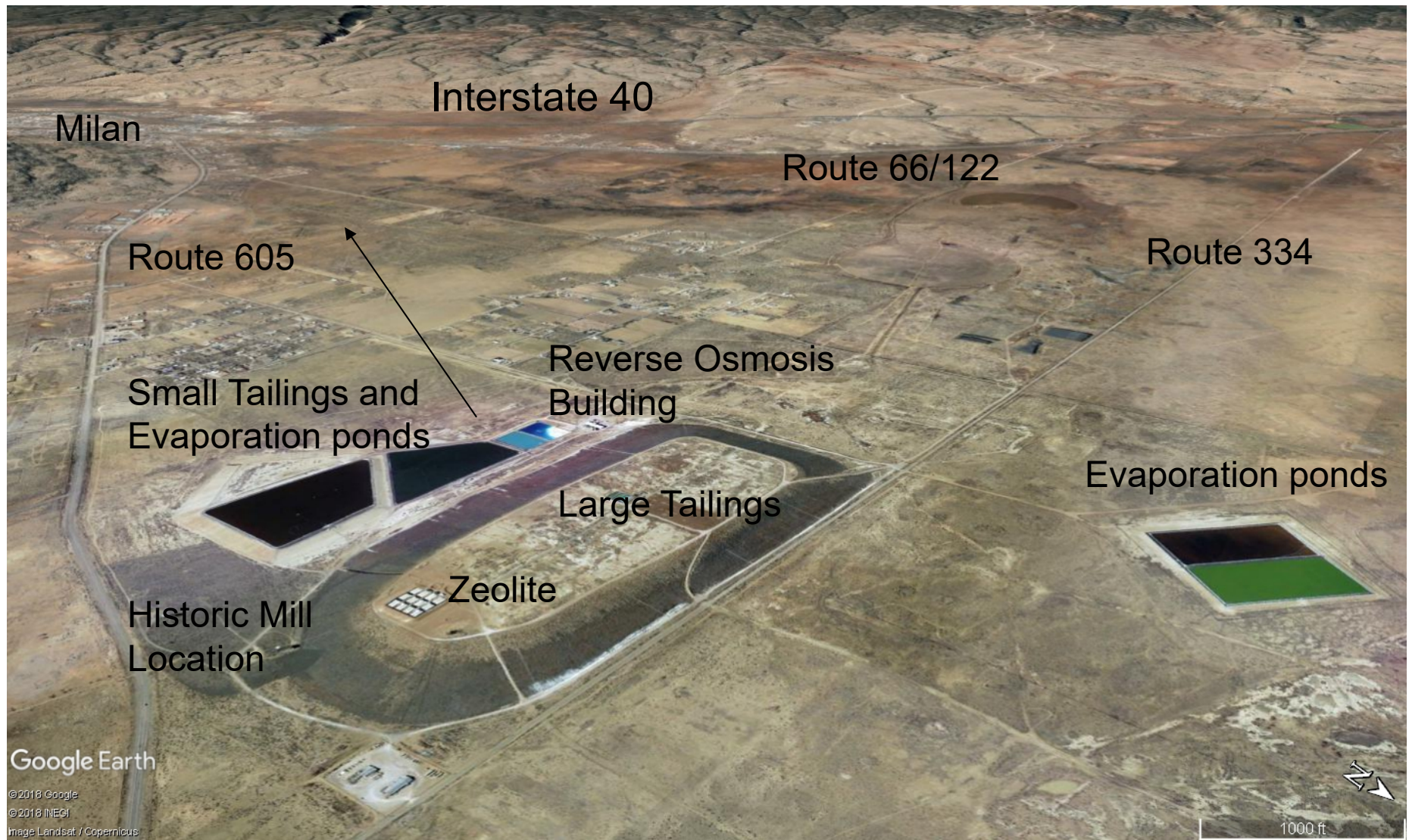
SPECIFIC URANIUM RECOVERY DECOMMISSIONING SITES



Decommissioning sites/Closure

- Decommissioning sites
 - Licensees in various stages of decommissioning at 4 sites
 - Staff involved in oversight of ongoing activities and review of license amendment requests
- Completion Review Reports – Agreement State Support
 - Staff supporting two reviews currently, anticipate 1-2 per year for the next several years.
- DOE Title I and II sites
 - GAO report on Legacy Management May 2020
 - *The Secretary of Energy should direct the Director of LM to work with the Nuclear Regulatory Commission to develop agreements and procedures for identifying and addressing circumstances at LM sites that require new cleanup work beyond the scope of LM's mission, capabilities, and resources. DOE committed to completion by 9/21*
 - Focus on Shiprock, Bluewater, Mexican Hat, Tuba City
 - Consult with Navajo Nation

Homestake Site Grants, NM

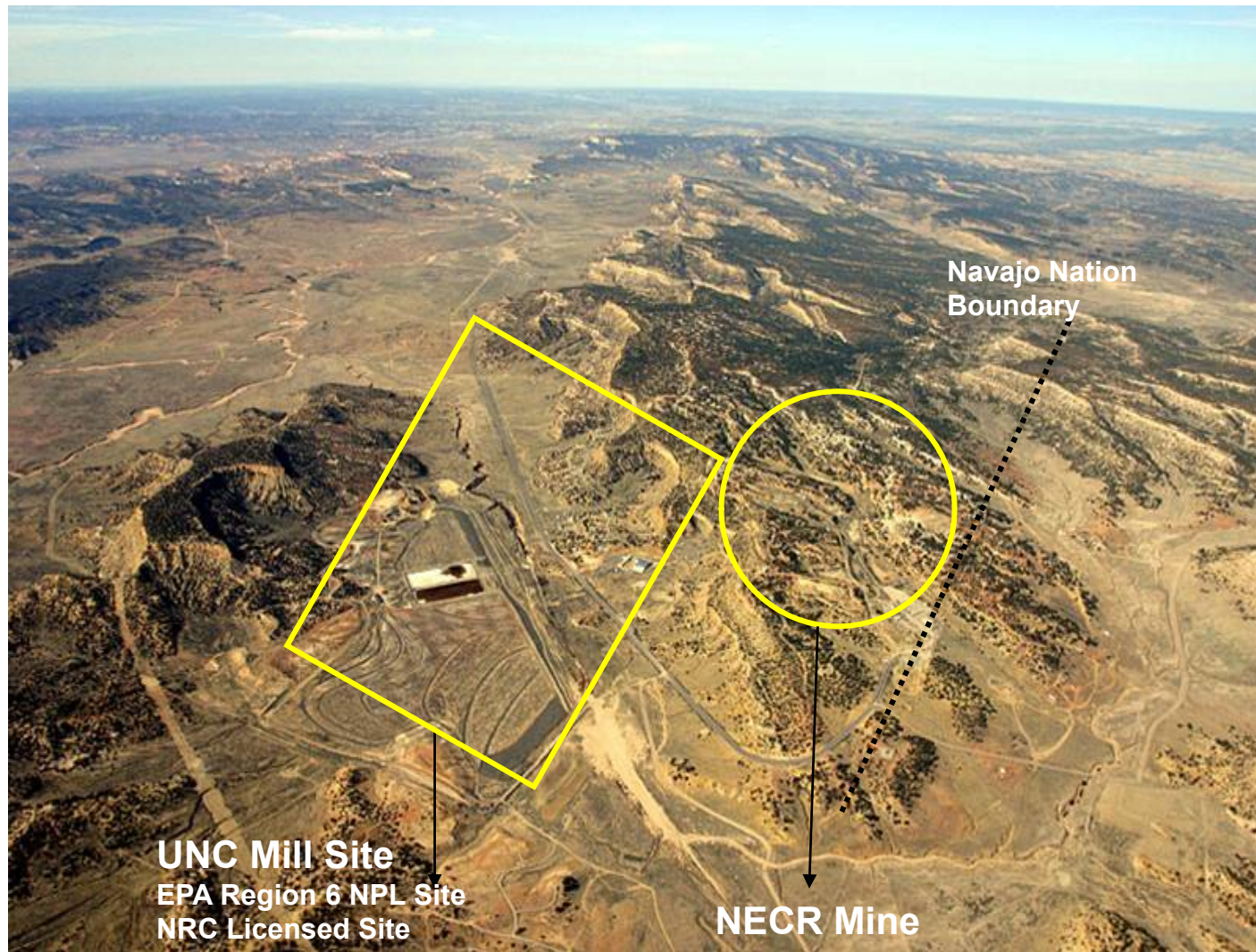




UNC Churchrock site

- Conventional mill tailings site located in Churchrock, NM
- Adjacent North East Churchrock uranium mine site – Number 1 Navajo priority site out of over 500 abandoned uranium mines
 - EPA led cleanup
- License amendment request to bring mine waste onto the NRC mill site
 - EIS with consultation with Navajo Nation and coordination with the EPA, DOE, and State
 - SER goal September 2020
 - Draft EIS goal October 2020 Final EIS September 2021

UNC Churchrock site



Shiprock DOE Title I site on Navajo Reservation



Questions?



Photo: Glacier NP, Montana